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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,699	05/16/2005	Philippe Cateau	047578/286155	8621
826 7590 11/10/2009 ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			EXAMINER MAI, THIEN T	
			ART UNIT 2887	PAPER NUMBER
			MAIL DATE 11/10/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/517,699

**Applicant(s)**

CATTEAU ET AL.

**Examiner**

THIEN T. MAI

**Art Unit**

2887

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 18-21, 24-30 and 36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 18-21, 24-30 and 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

**Acknowledgement**

Acknowledgement is hereby made of Amendment filed 7/27/2009.

**Claim Rejections - 35 USC § 103**

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim(s) 1, 18, 21, 24-25 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over *Albert et al.* (US 6,118,426, previously cited) in view of *Gelbman* (US 20020167500 A1, previously cited).

Re claims 1, 18, 21, 24, *Albert et al.* discloses an electrophoretic display label (col.2 lines 20-27) having "an antenna 302 that can be a monopole antenna, a dipole antenna, a planar array, a coil or any other antenna structure known in the art of radio reception" (col. 14 lines 10-17). The antenna surrounds the label as seen in Fig. 6B and is on the same substrate (as the claimed wall) where label 350 is disposed on.

Col. 10 lines 27-40 describes the capacitance of the display is modified in response to a pressure from actuating a transducer. Col. 18 lines 25-35 describe the display has capacitance in the range of .1-100 picofarads per square meter responsive to "electric field" being applied charging the plates, which is used to eliminate power draw between image updates. Therefore the antenna could act as a transducer (for converting radio energy received from remote transmitter 370 into electrical energy) in connection with the display to form a capacitor. The

antenna 302 has at least 2 pairs of parallel legs interpreted as heads surrounding the display 350 as seen in Fig. 6. The display itself comprises conductive material in the coating layers and further comprises gold metal (col. 6 lines 27-58, col. 8 lines 39-55, col. 9 lines 40-50, col. 13 lines 12-47, col. 18 lines 35-55).

*Albert et al.* is unclear with respect to the antenna layer capable of transmitting data.

*Gelbman* discloses an electronic label 16 having an antenna layer 48 that, in cooperation with a display, is configured to transmit and receive data through an integrated circuit layer 54 (*Gelbman*, paragraph 74, claim 48, Fig. 6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of *Gelbman*.

One of ordinary skill in the art would be motivated to employ the teachings of *Gelbman* since they would allow any desired information such as status and position to be transmitted to an external device for analysis thereby appropriate actions may take place in case the label is broken or does not function as desired.

Re claim 25, *Albert et al.*'s electrical bridge is interpreted as the display.

3. Claim(s) 19-20 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over *Albert et al.* (US 6,118,426) modified by *Gelbman* (US 20020167500 A1) in view of *Blanc et al.* (US 6,437,985). The teachings of *Albert et al.* and *Gelbman* have been discussed above.

*Albert et al.* as modified by *Gelbman* does not teach insulation layer comprising a decorative layer.

Re claim 19-20, *Blanc et al.* discloses an insulating layer (22), wherein the antenna is disposed between the wall and the insulating layer (Fig. 9). The insulating layer comprises a decorative layer (col. 3 lines 49-58, col. 9 lines 63-64: film 22 can be deposited with decorative information)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of *Blanc et al.*

One of ordinary skill in the art would be motivated to employ the teachings of *Blanc et al.* since they would allow attractive and decorative information printed on the label thereby providing information to viewers about the label without a need to provide any power to the electronic display.

4. Claim(s) 26-30 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over *Albert et al.* (US 6,118,426) modified by *Gelbman* (US 20020167500 A1) in view of *Martin* (US 6950023 B1). The teachings of *Albert et al.* and *Gelbman* have been discussed above.

Re claim 26-30, *Albert et al.* as modified by *Gelbman* does not show a flat cable connected to the first and second antenna heads.

*Martin* discloses a flat cable comprises at least 2 segments connecting processing electronics 14 (inherently comprises a processor chip) to antenna heads (Fig. 1-3). Tabs 48, 46 at the ends of the coil each has an opening for placing solder on (col. 3 lines 50+). The wall defines an opening so that the flat cable is passed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of *Martin* by running a flat cable connected to the first and second antenna heads.

One of ordinary skill in the art would be motivated to employ the teachings of *Martin* since they would allow pre-made antenna coil heads to be connected to each other in order for the antenna to transmit, receive, and facilitate storing information.

5. Claim(s) 36 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over *Albert et al.* (US 6,118,426) modified by *Gelbman* (US 20020167500 A1) in view of *Suga et al.* (US 6,427,065). The teachings of *Albert et al.* and *Gelbman* have been discussed above.

Re claim 36, *Albert et al.* as modified by *Gelbman* lacks the teaching of impedance matching.

*Suga et al.* discloses a matching circuit and/or chip (Fig. 4-5, 14) that uses the antenna coil and capacitor 25 to variably match the impedance of the desired power supply voltage to internal circuits (col. 2 lines 45+, col. 3 lines 20+, col. 9 lines 45+, col. 14 lines 29+)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the impedance matching circuit and related teachings of *Suga et al.*

One of ordinary skill in the art would be motivated to employ the teachings of *Suga et al.* in order for the power voltage for the label's internal circuit to be controlled thereby minimizing possible failures.

### **Remarks**

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. The Examiner would like to clarify his interpretation of the antenna being used as a transducer to provide power to the label, is well known in the art. Levis (US 4178100 A), Vogel (US 4263595 A), and Masak (US 4771289 A) teach that an antenna is a transducer that converts electromagnetic energy into electrical energy.

### **Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THIEN T. MAI whose telephone number is (571)272-8283. The examiner can normally be reached on Monday through Friday, 8:00 - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve S. Paik can be reached on 571-272-2404. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thien T Mai/  
Examiner, Art Unit 2887

/Thien M. Le/  
Primary Examiner, Art Unit 2887